

### ABSTRACT

Sodium nonatitanate compositions, a method using the composition for recovery of  $^{82}\text{Sr}$  from irradiated targets, and a method using the composition for generating  $^{82}\text{Rb}$ . The sodium nonatitanate materials of the invention are highly selective at separating strontium from solutions derived from the dissolution of irradiated target materials, thus reducing target processing times. The compositions also have a very low affinity for rubidium, making it an ideal material for use as a  $^{82}\text{Rb}$  generator. Sodium nonatitanate materials of this type both improve the recovery of  $^{82}\text{Sr}$  and provide a safer, more effective  $^{82}\text{Rb}$  generator system.

TO: "EL833794680"